

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

What is claimed is:

1. **(Currently Amended)** A land based seismic data collection unit comprising:
  - a. a non-spherical, fully enclosed case formed of a single housing, said case having a wall defining an internal compartment within said housing;
  - b. at least one geophone internally fixed within said housing;
  - c. a clock disposed within said housing;
  - d. a power source disposed within said housing; and
  - e. a seismic data recorder comprised of continuous, long-term memory disposed within said housing and capable of storing seismic reflections from a seismic survey from a series of seismic shots over an extended period of time,
  - f. wherein each of said elements b-e include an electrical connection and all electrical connections between any elements b-e are contained within said housing; and
  - g. wherein said geophone is coupled to said seismic data recorder to permit seismic signals detected by said geophones to be recorded on said seismic data recorder.
2. **(Original)** The unit of Claim 1, wherein said unit is self contained and requires no external communications or controls during recording.
3. **(Original)** The unit of Claim 1, wherein the case is watertight.

4. **(Currently Amended)** The unit of Claim 1, wherein said clock is coupled to said seismic data recorder to record the time seismic signals are detected by said geophones wherein the case comprises a first plate having a first periphery and a second plate having a second periphery, wherein the plates are joined along their peripheries by said wall.
5. **(Original)** The unit of Claim 1, wherein said case is defined by at least one substantially flat wall.
6. **(Previously Amended)** The unit of Claim 5, wherein said at least one geophone is disposed adjacent said flat wall.
7. **(Original)** The unit of Claim 1, wherein the case is defined by at least one plate.
8. **(Original)** The unit of Claim 7, wherein said at least one geophone is disposed adjacent said plate.
9. **(Currently Amended)** A land based seismic data collection unit comprising:
  - a. a non-spherical, fully enclosed case formed of a single housing, said case having a wall defining an internal compartment within said housing;
  - b. at least one geophone internally fixed disposed within said housing;
  - c. a clock disposed within said housing;
  - d. a power source; and

- e. a seismic data recorder comprised of continuous, long-term memory disposed within said housing and capable of storing seismic reflections from a seismic survey from a series of seismic shots over an extended period of time.
- f. wherein each of said elements b-c include an electrical connection and all electrical connections between any elements b-c are contained within said housing.
10. **(Original)** The unit of Claim 9, wherein said unit is self contained and requires no external communications or controls during recording.
11. **(Original)** The unit of Claim 9, wherein the power source is disposed within the case.
12. **(Original)** The unit of Claim 9, wherein the power source includes a fuel cell attached to the case.
13. **(Original)** The unit of Claim 9, wherein the power source includes a solar cell attached to the case.
14. **(Original)** The unit of Claim 1, wherein the wall is non-spherical.
15. **(Original)** The unit of Claim 1, wherein the wall is non-hemispherical.
16. **(Original)** The unit of Claim 1, wherein the case defines an external surface, and the external surface is provided with ridges to enhance coupling of unit with the earth.
17. **(Original)** The unit of Claim 16, wherein the case defines an external surface, and the external surface is provided with at least one spike to enhance coupling of unit with the earth.

18. **(Original)** The unit of Claim 1, further comprising
  - a. three geophones disposed within said case; and
  - b. a compass.
19. **(Original)** The unit of Claim 1, further comprising
  - a. a tilt meter disposed within said case.
20. **(Original)** The unit of Claim 1, further comprising a GPS location transducer.
21. **(Original)** The unit of Claim 1, further comprising a radio unit.
22. **(Original)** The unit of Claim 1, wherein said clock is a crystal clock.
23. **(Original)** The unit of Claim 1, wherein said clock is a rubidium clock.
24. **(Original)** The unit of Claim 1, further comprising an external connector in electrical communication with at least one of said geophone, clock, power source and seismic recorder, said connector extending through the wall of said case and disposed within said wall so as to be set in from the external surface of said wall.
25. **(Original)** The unit of Claim 24, further comprising a water tight, pressure resistant cap disposed over said external connector.
26. **(Original)** The unit of Claim 1, further comprising a radio frequency identification.
27. **(Original)** The unit of Claim 1, wherein said power source provides all power to the unit while deployed.

28. **(Original)** The unit of Claim 1, wherein said power source is a lithium-ion battery.
29. **(Original)** The unit of Claim 1, further comprising an internal control mechanism for controlling all functions of the unit while deployed.
- 30-68. **(Cancelled)**
69. **(Previously Amended)** The seismic data collection unit of claim 9, further comprising:
- a. at least four seismic data geophones disposed within said case.
70. **(Original)** The seismic data collection unit of claim 69, wherein said at least four geophones are arranged in a tetrahedral configuration.
71. **(Previously Amended)** The seismic data collection unit of claim 9, further comprising:
- a. at least five geophones disposed within said case.
- 72-90. **(Cancelled)**
91. **(Previously Amended)** The seismic data collection unit of claim 9, further comprising:
- a. at least four seismic data geophones disposed within said case, wherein at least three of said geophones are disposed adjacent one another and at least one geophone is disposed in a location within said case removed from said other geophones.
92. **(Original)** The seismic data collection unit of claim 91, further comprising a case in which the at least four seismic data geophones are disposed, wherein said at least three geophones

are disposed in said case to maximize detection of seismic energy and said at least one geophone is disposed in said case to maximize vibration of said case by said removed geophone.

93-108 (Cancelled) Please delete.

109. (Currently Amended) A land based seismic data collection unit comprising:

- a. a non-spherical, fully enclosed case formed of a single housing, said case having a wall defining an internal compartment within said housing;
- b. at least one ~~three component~~ geophone internally fixed within said housing;
- c. a clock disposed within said housing;
- d. a power source disposed within said housing;
- e. positional electronics disposed within said housing;
- f. orientation electronics disposed within said housing; and
- g. a seismic data recorder comprised of continuous, long-term memory disposed within said housing and capable of storing seismic reflections from a seismic survey from a series of seismic shots over an extended period of time
- h. wherein each of said elements b-g include an electrical connection and all electrical connections between any elements b-g are contained within said housing.